



Safeguarding Peace ...Safeguarding Lives

Joint Non-Lethal Weapons Program

Second Quarter, Fiscal Year 2005

Note from the Director

We are entering an exciting time in the development and utilization of non-lethal weapons throughout the Department of Defense. Technological advances are allowing us to progress from an arsenal primarily comprised of blunt-impact weapons to an arsenal of technologically advanced kinetic weapons coupled with state-of-the-art directed energy weapons. Utilization of non-lethal weapons during Operations Enduring Freedom and Iraqi Freedom has solidified the warfighters' confidence in the non-lethality and effectiveness of currently fielded systems in operational environments. Commanders are regularly identifying non-lethal requirements in the field, and the current staff within the JNLWP is exceptionally qualified to take those requirements and formulate viable non-lethal solutions. These solutions utilize both commercial off-the-shelf (COTS) products and the development of new technologies to meet these identified needs.

We hope that you will continue to follow the progress of our non-lethal weapons programs as they provide an added dimension to today's multi-faceted battlefield and provide our service men and women additional tools to accomplish their missions.

NTAR VI Symposium

The non-lethal community, academia and industry came together 15-17 November 2004 in Winston-Salem, N.C., to share non-lethal technology ideas, work and interests at the Non-Lethal Technology and Academic Research (NTAR) VI Symposium. This year's event hosted more than 100 foreign and domestic attendees from universities, private industry, law enforcement and government agencies.



"The opportunity to network with people from other government agencies, other universities and industry was very successful and appreciated; there was a diverse group of people all in one place," said Mr. Glen Shwaery, the Director of the Non Lethal Technology Innovation Center (NTIC) at the University of New Hampshire. NTIC hosted the 2004 NTAR Symposium on behalf of the Joint Non-Lethal Weapons Program, which sponsors this annual event—the only one of its kind in the United States.

The Symposium commenced with a well-received keynote speech delivered by Mr. George Solhan, Director of ONR-353, Expeditionary Warfare Operations Technology Division. Mr. Solhan spoke about the need to seek out new ideas and technologies in all areas of study, as well as about cognitive workload and predicting biological and psychological effects using human effects models.

The papers discussed during the Symposium covered a range of research areas including human effects, crowd control and advanced technologies. On the first day of presentations, researchers shared an array of expertise in Human Effects-related topics, such as blunt impact, thermal injuries and electrical shock. Each of the Human Effects topics demonstrated the need to fully understand the biological, psychological and physiological effects of non-lethal technologies in order to verify thresholds, predict outcomes, increase effectiveness and limit undesired effects. The second day of presentations offered a greater focus on crowd control and laser technologies. A number of posters displaying a range of technologies, products and research projects were available for viewing between sessions on both days.

As knowledge and interest in non-lethal weapons grows, the base of researchers and research institutions willing to turn their focus to these technologies is increasing. "The quality of talks was the highest from any Symposium, which is a direct reflection on the grant recipients from the past two years," said Mr. Shwaery. "We have finally been able to engage folks with successful laboratory programs in non-lethal science and technology efforts."

For more information about NTIC or NTAR, as well as abstracts, posters and papers from each of the Symposium's presenters, please visit the NTIC Web site at <http://www.unh.edu/ntic>.

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Industrial College of the Armed Forces (ICAF) Students on the Firing Range use Non Lethal Weapons



On 19 October, 17 students from this year's ICAF Non-Lethal Weapons course participated in a non-lethal weapon firing demonstration at Quantico Marine Corps Base. This annual elective is offered as an introduction to non-lethal warfare, its development, and its utility in

today's battlefield. The students fired 12mm gauge fin stabilized rounds, the FN 303 non-lethal launcher and 40mm M203 non-lethal grenades to name a few. "I preferred the 12mm bean bag rounds over the 12mm gauge fin stabilized rounds because the bean bags gives you more distance," said Steve Asher from AF Security Forces. "The farther I can be from my target the better I feel. In a riot situation, the farther I am the less possibility I'll get hurt."

Active Denial System (ADS) Update

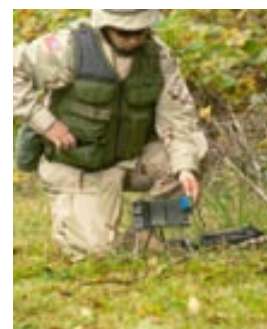


System 1, the HMMWV-integrated ADS was delivered to the government after full-power testing at the Naval Air Weapons Station -- China Lake, Calif. AFRL will now conduct a series of tests to characterize

system performance and reliability in advance of Phase 1 of the ACTD Military Utility Assessment (MUA) at Indian Springs Auxiliary Air Field, Nev. Phase 1 will exercise the system in perimeter defense, airfield protection and Military Operations in Urban Terrain (MOUT) scenarios. Phase 1 is scheduled to begin in 2QFY05. Scenarios for Phases 2 and 3 of the MUA are still being developed through consultations with Joint Forces Command (JFCOM), the *sponsoring combatant command*. Scenarios anticipated for these Phases include Maritime support and an expanded MOUT exercise. A public display of System 1 is being planned for 3QFY05. The purpose of this display is to educate individuals within the Department of Defense, the general public, and the media regarding the capabilities, safety, and employment capabilities of ADS System 1 and Active Denial Technology.

Hand Emplaced NL Munitions (HENLM) Demonstration

The technological solution to the Hand Emplaced Non-Lethal Munitions (HENLM) program was demonstrated on 28 and 29 September 04. In support of the 3QFY05 Milestone B Decision, the Taser Anti-Personnel Munition (TAPM) was demonstrated at Picatinny, N.J. to the US Army MDA, BG Paul Izzo, PEO-AMMO and Joint Service leads. TAPM was able to sense and engage moving targets at ranges up to 21 feet with a Passive IR Sensor instead of triplines. The electric stun payload is delivered via the same replaceable cartridges used in the



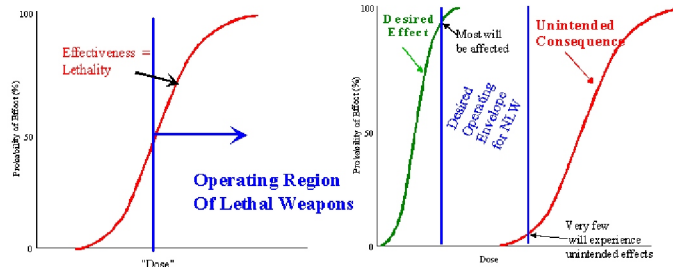
An extended range cartridge was developed under this effort and was also demonstrated successfully at 25 feet.

The current HENLM is on track and on schedule.

Prevail
"Let me make this very clear: Americans will not be intimidated... We will prevail."

EMI HERC

The HECOE conducted a HERC on electromuscular incapacitation (EMI) devices. Such devices carry electric current via two tethered darts to the target inducing involuntary muscle contractions and the desired temporary incapacitation. This HERC of EMI devices focused primarily on TASER International's M26 model and, to a lesser extent, the X26 TASER.



The HERC process is consistent with the National Academy of Sciences and the Society for Risk Analysis recommendations and standards. Through a series of data-sharing, peer consultation and Independent External Review Panel (IERP) workshops, a formal HERC report was drafted that identified relevant data, outlined potential data gaps, and contained dose-response and exposure assessments on the intended and unintended effects of EMI devices.

Overall, the report indicated that the use of the TASER M26 and X26, as intended, would

generally be effective in inducing the desired temporarily incapacitating effect without presenting a significant risk of unintended severe effects. However, the IERP added that future research would be useful to extend the risk assessment findings across the spectrum of humanity.

The final HERC report is intended to support the JNLWP and the Services in their decision-making processes regarding the employment and further development of EMI devices. A report summary has been prepared for public release, and an expanded summary of the report will be published in the open literature in the near future.

Human Effects Process Action Team (HEPAT)

Two years after submitting recommendations to standardize human effects characterizations of non-lethal weapons, the HEPAT was reconstituted to evaluate the effectiveness of the processes implemented by the JNLWD. After a year of careful consideration, the team determined that the Human Effects Review Board (HERB), the Human Effects Center of Excellence (HECOE), and their Human Effects Risk Characterization (HERC) methodology provide an effective process for characterizing non-lethal weapons' human effects and also recommended that these processes be applied DoD-wide via a DoD Instruction. The JNLWD will forward the HEPAT's recommendations to the Office of the Secretary of Defense (OSD).



TIP Broad Agency Announcement (BAA) Status

The purpose of the JNLWD's Technology Investment Program (TIP) is to stimulate government laboratories, industry, and academia in generating new technology solutions to meet current or future non-lethal mission needs and requirements. A TIP panel is constituted each year and consisted of science and technology experts representing each Service, the OSD, and the JNLWD. The panel identifies significant non-lethal research priorities based on the Services' specific needs to establish TIP topics. The JNLWD publishes a Broad Area Announcement (BAA) requesting proposals for new technology solutions to address those topics. Last year, ten proposals were submitted for consideration.

The TIP panel recommended funding three of the proposals addressing counter-personnel and counter-vehicle applications requirements. Two efforts focusing on laser induced plasma application and a third identifying vehicle and vessel target sets and their likely vulnerabilities were funded for 2-year efforts.



2004 US Army Integrated Concept Team (ICT) Meeting

On 16-17 June 2004, a US Army Non Lethal ICT meeting was held at Ft. Leonard Wood, Mo. USAMPS hosted the meeting. Representatives from the US Army NL Center of Excellence (NLCE) chaired the event.

The purpose of the event was to identify needs, analyze gaps in the Army's NLW program, provide Functional Solution Analysis recommendations to the Joint Functional Area Analysis/Functional Needs Analysis/ Functional Solution Analysis (FAA/FNA/FSA) process, validate the NLW FAA and FNA and cross-walk the applicable NLW tasks to the Joint Functional Concepts.

Attendees included a panel of warfighters with recent experience in OIF/OEF, and representatives from other Army proponents, including the Infantry, Artillery, Aviation, Engineer, Chemical, and MP schools, USSOCOM, the JNLWD, TRADOC, I Corps G3, ARDEC and PM-Close Combat Systems.

Highlighted discussions included the crucial need to change leaders' mindsets regarding NLW/Capabilities. The biggest challenge regarding NLWs is the lack of education on their capabilities. To help in this matter some of the US Army resident courses have now added NLWs to their curriculum.



U.S. Coast Guard Holds NL ICT Workshop

With funding support from the JNLWD, the U. S. Coast Guard held its first ever Non-Lethal Requirements Integrated Concept Team (ICT) Workshop 21-22 September at the Coast Guard Research and Development Center in Groton, Conn. Overall the workshop was a great success and met all of its goals and objectives. Attended by over 40 Coast Guard representatives from all districts, areas and several headquarters commands, Coast Guard non-lethal requirements were identified and prioritized. The Workshop was co-chaired by the Office of Cutter Operations (G-OCU) and the Research and Development Center with facilitation by the R&DC support contractor. The Workshop included presentations that reviewed Coast Guard use of force policy, legal and environmental constraints to using NL technologies, on-going R&D efforts and JNLWD sponsored programs. The relationship between the Coast Guard and the JNLWD was discussed Coast Guard non-lethal requirements are incorporated into the technologies funded and managed by the JNLWD. Recent operational incidents that highlighted the need for NL technologies were reviewed, setting the stage for group brainstorming of NL requirements. Together the group developed a list of NL requirements, and then multi-voted to pare it down to the top priorities. Each district representative was able to lobby for his or her unique requirements. A consolidated list reflecting the consensus of the entire group resulted in a top priority of "stopping recreational vessels". The next six requirements ranked in order of importance included stopping vessels of various descriptions. Based upon this workshop, G-OCU and the R&D Center are better able to focus limited resources to develop those technologies that have the greatest potential to meet these requirements. Before the workshop closed, the value of standing up a "Virtual ICT" composed of many of the attendees was discussed. The general consensus was that this was a much-needed entity. The attendees had the necessary diversity of skills, backgrounds and roles to develop the Coast Guard's NL requirements and evaluate potential solutions.

2004 US Marine Corps Integrated Product Team (IPT) Meeting



On 13-15 July 2004, a US Marine Corps Non Lethal Integrated Product Team (NL IPT) Meeting was held at Quantico, Va. The USMC Central Action Officer for Non-Lethal Weapons Programs, chaired the event. Attendees included warfighters with recent experience in OIF/OEF from 2nd Marine Division, 26th Marine Expeditionary Unit (MEU), II Marine Expeditionary Force (MEF), MARFORPAC, 22nd MEU, 3rd Force Service Support Group (FSSG), Joint Forces Command, and Special Operations Training Group. These attendees brought back first hand Lessons Learned from Operation Iraqi Freedom and Operation Enduring Freedom. Other attendees included the JNLWD and the U.S. Army Military Police School.

Highlighted discussions included prioritization of NLW capabilities hierarchy, validation of mission tasks & capabilities, prioritization of mission tasks, and a recommendation for a NL Military Occupational Specialty. Other points addressed during the IPT included US Non-lethal Mission Areas, capability gaps, Joint Non-Lethal Weapons overview, NLW Hierarchy, Ratings Solutions vs. Capabilities and a Summary of Potential Solutions.

A recommendation that surfaced among all of the attendees was the continued education awareness of non-lethal capabilities at the Commanding Officer level.

The next USMC IPT will be held during 2QFY05.

Combatant Commander's (COCOM) Engagement

During the preceding months, the JNLWD has continued to explore, dialogue with and engage the COCOMs and their Service Components for opportunities to brief and participate in exercises, experiments, seminars and related training events. The Directorate views COCOM engagement via these venues as an effective means of advancing the acceptance of non-lethal weapons, facilitating the stimulation of non-lethal requirements, and obtaining first-hand user inputs on fielded and anticipated non-lethal weapons for the future. The COCOMs and the JNLWD have supported and/or participated in the following events:

JFCOM Several Joint Urban Operations (JUO) Exercises, Joint Training System Support Team participation.
PACOM - Non-Lethal Seminar (NOLES) 04, Support drafting of Multi-National Forces Standard Operations Procedures (SOP), Exercise Cobra Gold 04, Exercise Ulchi Focus Lens (UFL) 04, Non-Lethal

COCOM cont'd on p.6...

Joint Integration Program (JIP)

On 11-12 August 2004, the Joint Integration Program (JIP) and working group



meeting was held in Quantico, Va. The JIP Chairperson chaired the event. The JIP provides a forum where various Service non-lethal requirements officers and program managers can exchange lessons learned, discuss new product ideas, combine future

studies/procurements, and ultimately improve their Service non-lethal capability sets.

Upgrading the capability sets is an important mission because these sets are where the deployed forces get the majority of their non-lethal weapons.

The August 2004 meeting set forth the FY05 JIP plan that includes funding for a non-lethal products researcher, a working level non-lethal weapons symposium, and evaluations of various non-lethal ammunition and weapons for possible inclusion in the Service non-lethal capability sets.

The demonstration/briefings at Quantico Marine Corps Base were attended by USA, USN, USMC, USCG, and USAF representatives and included a variety of Commercial Off the Shelf (COTS) and near COTS products from:

Armor Holdings.
AEGIS Personal Defense Systems.
Remington Arms.
Combined Tactical Systems.
Trident Police Products.
FNH USA.
Foster Miller

...COCOM can't from p.5

(NL) Capability Exercise and Summit (Tentative planned for January 2005 in Hawaii).

EUCOM - NLW Capability Demonstration in February 2004, Anti-Terrorism/Force Protection Component Commanders Conference.

NORTHCOM Exercise Determined Promise, Exercise United Defense.

CENTCOM Initial Staff Engagement (OIF-Lessons Learned), Anti-Terrorism/Force Protection Component Commanders Conference.

These exercises, seminars, and conferences are essential for the expansion of NLW throughout the Department of Defense. The contributions and use of NLW must be demonstrated and evaluated if the program is to develop and field joint capabilities that meet the warfighter's needs.

Joint Capabilities Integration and Development System (JCIDS)

The Commandant of the Marine Corps, as the DoD's Executive Agent (EA) for NLW, has directed that the JNLWP conduct a capabilities-based assessment of NLW. The necessity for this assessment is in light of the new JCIDS process, and will be based on real-world OIF and OEF operations and lessons learned.

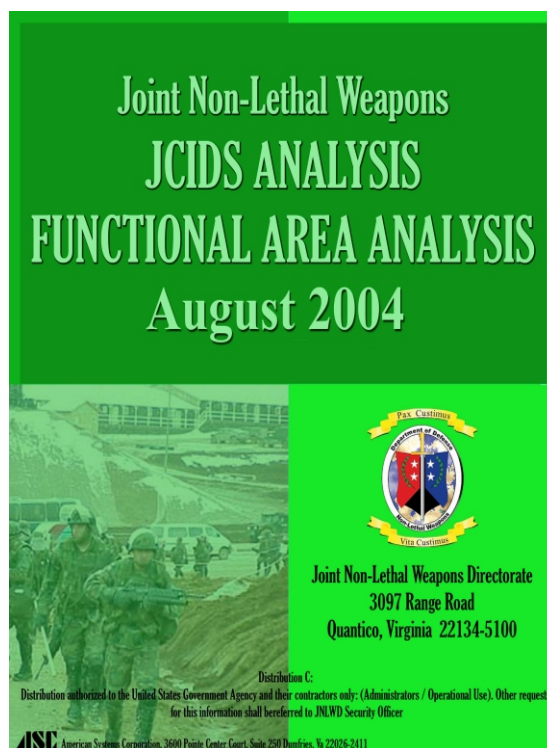
The JCIDS analysis process identifies capability gaps and redundancies, assesses the risk and priority of those gaps, and recommends the best approach (materiel and/or nonmateriel) or combination of approaches to address the gaps. There are three distinct phases to the JCIDS process: (1) the Functional Area Analysis (FAA), (2) the Functional Needs Analysis (FNA), and (3) the Functional Solutions Analysis (FSA). The JNLWJCIDS Analysis first phase was started in May 2004. The FAA identified the operational tasks, conditions, and standards needed to achieve the military objectives across the ROMO for which non-lethal weapons and non-lethal capabilities would provide task accomplishment. The FNA phase started in July after the completion of the FAA. The FNA assessed the ability of the current and programmed Joint and Service NLW capabilities to accomplish the operational tasks from the earlier FAA under the full range of operating conditions and to the designated standards. The FNA also identified the capability gaps or shortcomings that require non-materiel or materiel solutions. The results of the FNA are the inputs used for the assessment during the FSA.

The third phase of JNLW JCIDS is the FSA. The FSA officially started with a Working Group (WG)

meeting held on 5-7 October 2004. The FSA has three sequential sub-steps. The first sub-step is an operationally-based assessment of potential Doctrine, Organization, Training, Materiel, Leader Development, Personnel, and Facilities (DOTLMPF) approaches to solving or mitigating capability gaps identified in the FNA. This first sub-step was completed during the 5-6 October. The second sub-step of the FSA, the Ideas for Materiel Approaches (IMA), commenced with the distribution of ten capability ideas to the FSA WG for purposes of discussion and identification of gap resolution/mitigation. This sub-step was completed during 6-7 October.

The third and final sub-step of the FSA is the conduct of an Analysis of Materiel Approaches (AMA). The AMA determines the best way to use materiel approaches or combination of approaches to provide joint capabilities. Upon completion, the JNLW JCIDS Analysis process allows for the development of Initial Capabilities Document for materiel solutions for the desired NLWs.

The entire effort is a collaborative assessment and analysis process performed collectively with all Services, Combatant Commanders, and DoD Agencies, and will endeavor to develop potential solutions in an integrated fashion that reflects both current and future NLW requirements of Joint Force Commanders. The results, findings, and recommendations of this comprehensive analysis and assessment will be presented to the Joint Requirements Oversight Council (JROC).



JNLWD Education Awareness Program



The JNLWD has been a strong voice and advocate for expanding the information and acceptability of NLW as viable capabilities for the warfighters. The

JNLWD has been expanding its educational awareness program since 2001. The program is intended to educate Service personnel on the origin, policy, technology, use of, and human effects associated with NLWs. The current and future efforts include development of a Non-Lethal elective for inclusion in the curriculum of the following Joint Professional Military Education Institutions:

Marine Corps Command and Staff College (since 2001) .

Industrial College of the Armed Forces (January 2004).

Army War College (April 2004).

Joint Forces Staff College (August 2004).

The JNLWD will expand these electives in both the Air Command and Staff and the Naval War College (Junior Program) beginning in Fiscal Year 05 (FY05). The JNLWD is planning to develop Web based course for online users also in FY05. The Directorate is working with the Inter-Service Non-Lethal Individual Weapons Instructor Course at Fort Leonard Wood, Mo. to enhance their program of instruction. The end state for the JNLWP is to provide the Services and Joint communities with a cadre of personnel knowledgeable in NLWC.

Crowd Control Concept Exploration Program (CC CEP) Close Out

Mr. Hugh Huntzinger, Program Manager for the Crowd Control Concept Exploration Program (CC CEP) provided the closeout brief of the CC CEP at the December 2003 JNLWD Director Reviews.



The analytical objective of the CC CEP was to identify alternative non-lethal system concepts that alone or in the aggregate, satisfy functional area requirements within a military operational context defined by the Users.



Taking into consideration the CC CEP Analysis of Multiple Concepts and the urgent needs from the users (Service Reps), the following programs, as well as others not notated here, are spin offs of or supported by the outcome of the CC CEP effort:

40mm MK 19 Non Lethal Short Range Munition.

High Intensity Directional Acoustics (HIDA).

Tactical Unmanned Ground Vehicle (TUGV) with Multi-Tube Launched munition.

Portable Active Denial System (PADS).

The CC CEP Executive Summary has been distributed and the Final Report was distributed during 4QFY04.

AD-V Science & Technology (S&T) Closeout

With the U.S. Army as the lead, the Area Denial to Vehicles Concept Exploration Program (CEP) was initiated in 2000 to evaluate and determine alternative system concepts for satisfying the identified Universal Joint Task List / Missions Tasks within the non-lethal AD-V Functional Area and Counter-Materiel Core Capability. In October 2002, after review of the CEP down-select candidate analyses, it was realized that the candidate technologies and their accompanying concept systems fell into two widely separated groups: pre-emplaced mechanical devices and directed energy devices. This realization prompted a transition into the AD-V Science & Technology (S&T) Analysis in which the target set was characterized, potential solutions were assessed, and an AD-V S&T Roadmap was established.

Completed as part of the S&T Analysis were a Target Vehicle Matrix (TVM) and a Vehicle Susceptibility Analysis (VSA). The AD-V Joint Consortium also served as an important step to the development of the AD-V S&T Roadmap. The AD-V S&T Analysis was completed in May 2004. The Analysis concluded that a handful of concepts from across the technology taxonomy stood out as reasonable to pursue with respect to operational value/utility and developmental time and cost. Among the recommended technologies were a NL chemical-payload vehicle stopper, shaped charge, radio frequency directed energy vehicle stopper, and a laser/laser assisted technology. The S&T Roadmap recommended a temporal approach to the development of these AD-V technologies based on Technology Readiness Levels (TRLs), relative cost, estimated time to develop, and public acceptability.



Joint Non-Lethal Education and Training (JNET)

The Inter-Service Non-Lethal Individual Weapons Instructor Course (INWIC) is a two-week, "train the trainer" course designed to make the graduates capable of instructing their units in the employment of non-lethal weapons. Taught by a cadre of Marine and Civilian instructors, at the US Army Military Police School at Fort Leonard Wood, Mo., the INWIC is designed as a resident course, although Mobile Training Teams (MTT) have been conducted in the past. Annual school seats are allocated to all Services based on Service input from the Inter-service Training Review Organization (ITRO) process.

According to Maj. Casserly, the Officer in Charge for the INWIC, a recent new philosophy of doing much more on non-lethal education than just the instructor course has evolved. It is his opinion that INWIC should be used as the basis for other Services/Units end-user courses. The cadre has designated themselves as the Joint Non-Lethal Education and Training (JNET) Center. JNET must be a servant of the needs of the Operating Forces. JNET will be working to create a NL education curriculum that could eventually turn into a series of courses and learning products. Although NL training has come a long way, it is still immature compared with other skills taught at formal schools.

JNLWD Vacancy Announcement

The JNLWD presently has the following position announcement open and any U.S. Citizen that meets the requirements may apply to: Human Resources Service Center East, Code 52, Building 17, Norfolk Naval Shipyard, Portsmouth, VA. 23709-5000. For further details go to: www.donhr.navy.mil

JNLWD VACANCY ANNOUNCEMENT: EA4-XXXX-13-PR192994-DE-FL

Salary (including locality pay): \$72,108.00 - \$93,742.00 per annum

Permanent Position

Duties: Serves as a member of the Technology Division working in conjunction with and in support of the Health Effects Officer of the JNLWD. Provides a broad range of expertise for the exploration of a wide variety of issues related to the effects of non-lethal stimuli on humans. Responsibilities assigned to the individual will be roughly split between research and project management activities. Duties include applying biomedical science expertise to develop research plans and overseeing execution of research to better understand the human effects of non-lethal stimuli; addressing human effect issues of Joint Non-lethal Weapons pre-acquisition and acquisition projects and programs; and supporting routine requirements of the JNLWD.

Qualification Requirements: To qualify for this position, you must possess both the Basic Requirements as well as the Specialized Experience as indicated in the formal announcement for:

Physiologist, GS 0413-13 or
Industrial Hygienist, GS-690-13 or
Health Physicist, GS-1306-13 or
Biomedical Engineer, GS-0858-13

calendar Onward...

January

| | | |
|-------|--------------------------|-----------------|
| 25-27 | Crowd Behavior WG. | San Antonio, TX |
| 26 | PACOM NLW Summit & CAPEX | |
| 27 | NLW CAO Mtg | |

February

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|------|----------------------|--------------------------|
| 2 | NDIA SOLIC | Wash. D.C. |
| 2-3 | NLMPPM AOA Mtg | Vienna, VA |
| 3 | ANLM Req. IPT | Fort Benning, GA |
| 9-18 | ADS ACTD MUA Phase I | Indian Springs, AFAF, NV |
| 16 | JCIG | |
| 22 | ANLM HE IPT | APG, MD |

March

| | | |
|-------|----------------------|--------------------------|
| 14-18 | ADS ACTD MUA Phase 2 | PAX River, MD |
| 17 | IPT | Pentagon Washington, D.C |
| 23-24 | JIP Symposium | Quantico, VA |

New Voting Principals (IPT & JCIG)

New IPT Voting Principal

Rear Adm. David W. Kunkel assumed the duties of the Director of Operations Capability in August 2004. In this capacity, he is responsible to the Assistant Commandant for Operations for the allocation, distribution, management, and recapitalization of all Coast Guard operational forces (aircraft, cutters, boat forces, shore facilities, and operational command infrastructure) and for the administration and integration of the Coast Guard Auxiliary.

Rear Adm. Kunkel's most recent assignment was as the Commander of the Joint Interagency Task Force, where he directed all Department of Defense counter narco-terrorist efforts for the Commander, U.S. Pacific Command. Other staff assignments included Aviation Maintenance Officer of Aeronautical Engineering. He served at the Coast Guard Pacific Area Staff as the Chief of Naval Operations and later as the Chief of Staff.



Brig Gen (S)

Robert H. Holmes was assigned as the Director of Security Forces, Headquarters U.S. Air Force, Washington, D.C. in September 2004. He is

the focal point for force protection within the Air Force and is responsible for planning and programming the security for 30,000 active-duty and Reserve components security forces at locations worldwide. He provides policy and oversight for protecting Air Force installations from terrorism, criminal acts, sabotage and acts of war, and ensures security forces are trained, equipped and ready to support contingency and exercise plans.

Brig Gen (S) Holmes is a career Combat Control Officer having commanded a combat control detachment, the 22nd Special Tactics Squadron, as well as the 720th Special Tactics Group. During Operation Enduring Freedom (OEF), Brig Gen (S) Holmes was the Deputy Commander, Joint Special Operations Task Force-South (Task Force K-Bar), responsible for directing and conducting joint combat operations in southern Afghanistan.



New JCIG Voting Principal

The new SOCOM Joint Coordination & Integration Group (JCIG) Voting Principal is **Capt. John Bruns**.

He is currently assigned to Special Operations Command located at MacDill Air Force Base in Tampa, Fla. Capt. Bruns' previous assignments include serving as the Executive Officer on the USS PITTSBURGH and the Commanding Officer of USS LOUISIANA. Capt. Bruns also served as the C4I Officer, Information Warfare Commander, N6 Assistant Chief of Staff and Staff Submarine Officer attached to the ENTERPRISE Battle Group. He completed a seven-month deployment to both the Mediterranean Sea and Arabian Sea in support of OEF.

Congratulations to...

Promotions

Congratulations to the following on their promotions this year:

Vic Dodson, Program Analyst, Acquisition Division

Dave Law, Technology Division Chief

Susan LeVine, Principal Deputy for Policy and Resources

Kevin Swenson, Acquisition Division Chief

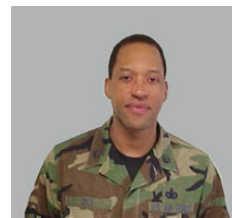
Hail and Farewell

The JNLWD would like to say farewell to:

Col. "Chuck" Rice

Col. Charles "Chuck" Rice, Deputy Director of the JNLWD, departed the Directorate in June 2004 and was assigned as Chief, Command Security, STRATCOM, Offutt AFB, Neb. This assignment extends his 20 years of committed service to the Air Force, which began in October 1984.

Thank you, Col. Rice, for your dedicated contribution to the JNLWD.

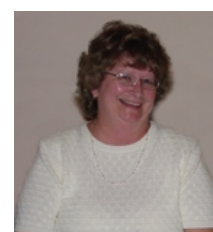


Col. Rice

Rosalind Tyndall, JNLWD Management Analyst

Rosalind "Ros" Tyndall, Management Analyst for the JNLWD, completed her employment at the Directorate in September 2004 after 28 years in the government sector. Before joining the JNLWD, Ms. Tyndall worked at Fort Belvoir in the Research, Development and Engineering Center, focusing on lethal weapons. "Coming to the Directorate gave me a good feeling. The future of the office (Program) is to save lives rather than take lives. The emphasis was on weapons, but when people are hit they can still walk away and function. It's not like it's the end." As for parting remarks from someone else moving on to retirement, Ms. Tyndall said "It was enjoyable to work all those years and it served a purpose but if anyone is thinking about retiring don't be afraid. . . it's not the end of the world . . . I just felt it was time to let go and move on."

Congratulations Ros as you continue to enjoy your retirement!



Ms. Tyndall

Robert "Terry" Wright, Deputy Acquisition Chief

Terry Wright, Acquisition Division Chief of the JNLWD, brought to a close 33 years of government service in September 2004. His Federal service career began in the Air Force, and included several tours of duty in Vietnam, followed by his first federal job with the Naval Weapons Engineering Support Activity at the Washington Navy Yard. There, he was responsible for the procurement of Electronic Warfare equipment as a Production Engineer. Eventually Terry came to the Directorate and literally opened the Directorate doors. "The first seven years we made quantum leaps in providing non lethal capability sets. I can just imagine what the next seven years can bring to the warfighter and the resolution to conflict in general," said Terry.

Good luck, Terry, on your relocation to Tennessee and a new career in the private sector.



Mr. Wright

The JNLWD would like to welcome:

Maj. Fred Beata, USMC

Maj. Fred Beata's assignment with the JNLWD began July 2004 as the Concept and Training Officer within the Concepts and Requirements Division.

Following commissioning, Maj. Beata attended The Basic School and was assigned to Supply Company, 3rd Supply Battalion, 3rd Force Service Support Group, Okinawa Japan where he served as the Supply and Fiscal Officer of a Maintenance Support Unit, Material Issue Point and Maintenance Float. After assignment with 3rd Combat Engineer Battalion, 3rd Marine Division as the Battalion Supply/Fiscal Officer, he was assigned to the Installations and Logistics Department, HQMC, where he served as the Occupational Sponsor for the 30XX MOS community.

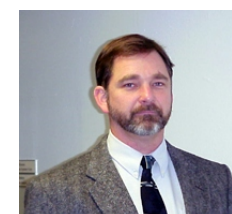
During June 2001, he was transferred to the Joint Total Asset Visibility Program Office at Defense Logistics Agency, Fort Belvoir, where he served as the Concepts and Training Officer. His next assignment was with Plans Policies and Operations, HQMC as the Operations Officer in the Crisis Response Center prior to his current role at the JNLWD.



Maj. Beata

Steve Boyle, Program Analyst, Acquisition Division

Prior to joining the JNLWD, Mr. Boyle worked at Camber as a program manager for mobility, counter-mobility and Marine Corps engineering, for Camber Corporation. Mr. Boyle duties will include being the Acquisition for Area Denial Vehicle programs, FN303, monitor ANLM, VLAD, EFDS, etc....



Mr. Boyle

Tim Fox, JNLWD Concepts & Requirements, Assistant Division Chief

Timothy 'Tim' Fox joined the JNLWD as Assistant Division Chief to the Capability Requirements Division in July 2004. Most recently he was employed by several Washington, D.C. area defense contractors, including American Systems Corporation (ASC) who support the Joint Non Lethal Weapons Directorate. Mr. Fox retired from the US Marine Corps on 1 June 1997 after 20 years of service. His last assignment was as the Ground Combat Officer, Wargaming Division, Combat Warfighting Lab MCCDC, Quantico, Va.



Mr. Fox

Pam King, Program Analyst, Acquisition Division

Ms. King has been a federal employee at Quantico for the past 30 years. Her career began at the Traffic Management Office (TMO) in 1975. While working at TMO, she held several positions to include Claims Examiner and Supervisory Shipment Clerk. In 1986 she moved to Marine Corps Systems Command as a Cost/Financial Analyst. In 1990 she was promoted to Logistics Management Specialist in the Materiel Capabilities Division, Marine Corps Combat Development Command. In October 2004, Ms. King came on board with the JNLWD. She is serving as a Program Analyst in the Acquisition division. Her duties will include being the JNLWD monitor for the Mobility Denial System, Non-Lethal Mission Payload Module, Taser, ERASP and HENLM programs.



Ms. King

Maj. Troy Roberts, USAF

Maj. Troy Roberts reported to the JNLWD in August 2004 and is currently the Concepts and Doctrine Officer. Prior to joining the JNLWD he served as squadron Commander in the 341st Security Support Squadron and the 741st Missile Security Forces Squadron, and was promoted to Major in January of 2004. Some of his overseas postings include:

Al Dhafra, UAE in support of Operation SOUTHERN WATCH with the 763d Expeditionary Air Refueling Squadron; and RAF Akrotiri, Cyprus where he served as the Chief Security Forces Detachment 1.



Maj. Roberts

LTC Ray Smith, C&R Division Chief, US Army

LTC Ray Smith assumed his current assignment as the Requirements Officer in the Capabilities and Requirements Division of the JNLWD in June 2004. LTC Smith received his commission as a Military Police officer from North Georgia College in 1987, where he was a Distinguished Military Graduate. His deployment experience includes humanitarian assistance, peace enforcement and nation building, as well as combat operations in Panama and Operation Desert Storm. His last assignment was at the Pentagon, working for the Army G-3, Deputy Chief of Staff, Operations and Plans, as a Requirements Staff Officer (RSO). In that billet, he was responsible for validating all Force Protection, Non-Lethal, and Electronic Countermeasures Operational Needs for Operation Iraqi Freedom and Operation Enduring Freedom, as well as staffing, coordination and recommending final disposition for all future requirements in these areas. LTC Smith wrote the Army's Directed Requirement for the Platoon Sized Non-Lethal Capabilities Sets.



Lt. Col. Smith

Lt. Cmdr. David Strong, JNLWD Experimentation Officer

Lt. Cmdr. David Strong is contributing to the JNLWD in the role of Experimentation Officer. Lt. Cmdr. Strong began his service career in 1985 as a Coast Guard Reservist, attaining the grade of PS3 before attending the Coast Guard Academy. Upon graduating the Academy in 1991, he was assigned the Desk Watch Officer on USCGC STORIS in Kodiak, Alaska.

In 1993, he was assigned to the Pacific Area Tactical Law Enforcement Team in San Diego, Calif. as a Law Enforcement Detachment Officer in Charge. In 1995, Lt. Cmdr. Strong became the Operations Officer of USCGC DILIGENCE in Wilmington, N.C. He then assumed command of USCGC LIBERTY in Auke Bay, Alaska in 1997. After his command tour, he reported to the Coast Guard Personnel Command, Enlisted Personnel Management Division as a Central Assignment Coordinator. In 2001, he attended the Marine Corps Command and Staff College at Quantico. Following graduation, he was assigned as Executive Officer of USCGC DECISIVE in Pascagoula, Miss.



Lt. Cmdr. Strong